

DESCRIPTION

Species Reactivity	Human/Mouse
Specificity	Detects recombinant mouse RNF168 and recombinant human RNF168 in direct ELISAs and Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant mouse RNF168 Asn423-Arg565 Accession # Q80XJ2
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide
*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.	

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunocytochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

RNF168 (RING [really interesting new gene] finger protein 168; also E3 ubiquitin-protein ligase RNF168) is a 65 kDa (predicted) member of the RNF168 family of proteins. It is ubiquitously expressed, and serves as an E3 ubiquitin ligase. Following DNA damage, RNF8 is recruited to DNA double-strand breaks by phosphoMDC1. Here, RNF8 first monoubiquitinates histone H2A, and then promotes RNF168 recruitment. RNF168 now acts as an additional ubiquitinase, promoting multiple ubiquitinations plus the recruitment of 53BP1, a scaffold protein that holds DNA damage response elements. Mouse RNF168 is 565 amino acids (aa) in length. It contains one Zn-finger/RING domain (aa 16-55) plus two ubiquitin-interacting MIU motifs (aa 168-191 and 438-461). There are three potential Ser/Thr phosphorylation sites. Two potential isoform variants are reported. One shows an alternative start site at Met20, while a second possesses a two aa extension at the N-terminus coupled to a 13 aa substitution for aa 343-565. Over aa 423-565, mouse RNF168 shares 79% and 65.5% aa sequence identity with rat and human RNF168, respectively. Over aa 423-466, mouse RNF168 shares 98% aa sequence identity with human RNF168.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc., and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.